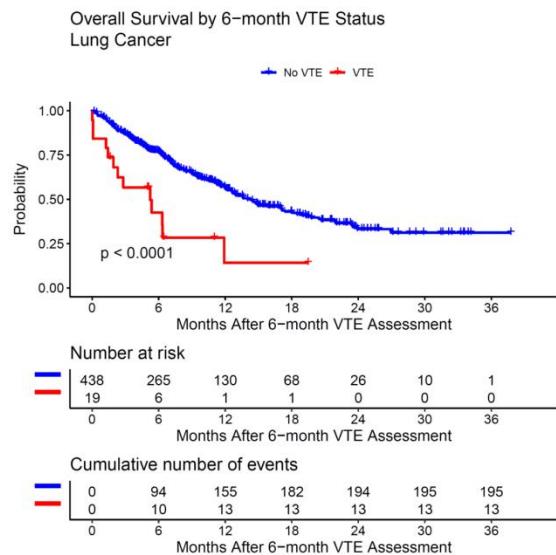
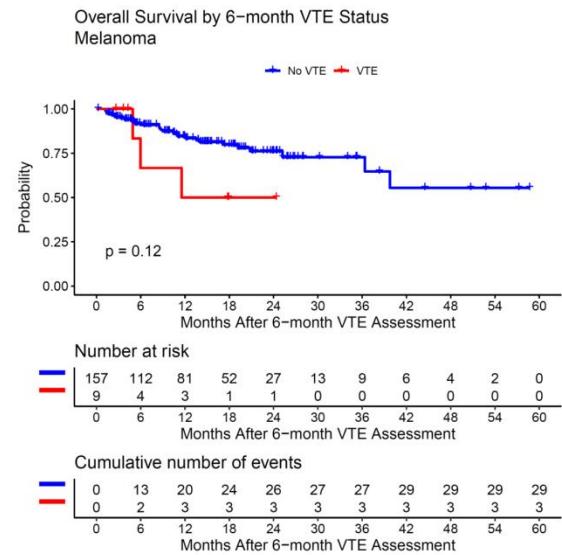


## **Supplemental Information**

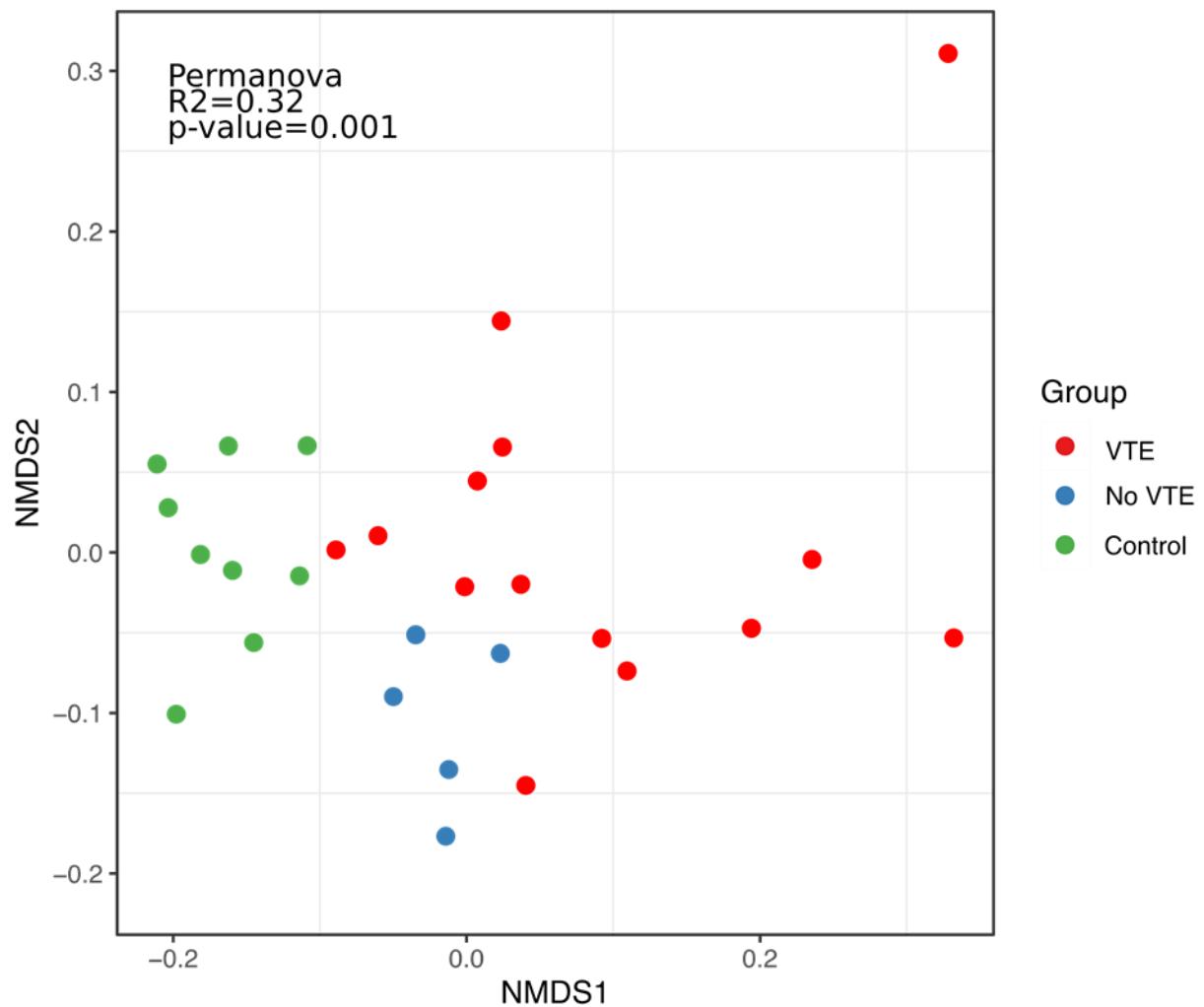
**A.**



**B.**



**Figure S1:** Overall survival of patients with lung cancer (A) and melanoma (B) by occurrence of VTE, related to Figure 1.



**Figure S2: Non-metric multi-dimensional analysis.** Non-metric multi-dimensional analysis was used to compare three patient groups (immunotherapy with VTE, immunotherapy without VTE, normal controls) by all MDSCs and soluble plasma analytes, related to Figures 2 and 3.

**Table S1:** Thrombosis rates by tumor type, related to Tables 2 and 3.

Tumor Type	VTE				All	
	No		Yes			
	N	%	N	%	N	%
<b>Unknown</b>	1	100.00	0	0	1	0.06
<b>Bladder</b>	121	76.10	38	23.90	159	9.43
<b>Breast</b>	7	53.85	6	46.15	13	0.77
<b>GI</b>	43	75.44	14	24.56	57	3.38
<b>GU-Other</b>	20	57.14	15	42.86	35	2.08
<b>GYN</b>	9	47.37	10	52.63	19	1.13
<b>HEM</b>	18	72.00	7	28.00	25	1.48
<b>Lung</b>	651	77.04	194	22.96	845	50.12
<b>Melanoma</b>	180	78.95	48	21.05	228	13.52
<b>Others</b>	87	79.09	23	20.91	110	6.52
<b>Renal</b>	145	74.74	49	25.26	194	11.51
<b>Total</b>	1282	76.04	404	23.96	1686	100.00

**Table S2:** Summary of cumulative incidence rates of VTE by tumor type and time point. Death is the competing risk in the model. Related to Table 3.

Tumor Type	6-month VTE Rate	95% LCL	95% UCL	1-year VTE Rate	95% LCL	95% UCL	2-year VTE Rate	95% LCL	95% UCL
Bladder	0.073	0.029	0.116	0.125	0.067	0.183	0.164	0.086	0.164
Breast	0.200	0	0.468	NA	NA	NA	NA	NA	NA
GI	0.064	0	0.136	0.092	0.004	0.179	NA	NA	NA
GU-Other	0.120	0	0.250	0.205	0.039	0.370	0.205	0.039	0.205
GYN	0.231	0	0.471	0.382	0.024	0.740	0.382	0.024	0.382
Lung	0.070	0.052	0.089	0.099	0.077	0.121	0.124	0.098	0.124
Melanoma	0.079	0.042	0.116	0.122	0.076	0.168	0.145	0.093	0.145

NA = not estimable (no data). LCL = lower confidence limit, UCL = upper confidence limit

**Table S3:** Panel of biomarkers assessed, related to Figure 3.

Biomarker	P value	Mean of VTE	Mean of Non-VTE	t ratio
IL-8	0.001627	221.2	57.49	3.424
sVCAM-1	0.038259	1209934	895466	2.091
GM-CSF	0.895706	0.1274	0.1069	0.4124
IL-4	0.061992	0.0257	0.007	1.966
IL-15	0.118688	12.19	9.796	1.624
MCP-4	0.137642	3638	2654	1.541
IL-13	0.154344	0.9336	0.2417	1.475
IP-10	0.161465	2105	1227	1.449
Tie-2	0.165349	2823	2425	1.435
IL-5	0.180724	0.2081	0.002	1.382
MDC	0.184405	949.9	736.1	1.37
IL-27	0.202622	3103	2296	1.313
Flt-1	0.228116	1209	259.2	1.24
IL-17C	0.245098	0	0.1797	1.194
MIP-3 $\alpha$	0.262716	9.381	4.854	1.149
IL-7	0.274766	7.968	6.266	1.12
TSLP	0.300351	1.632	0.9513	1.061
sICAM-1	0.302675	1072293	943750	1.055
IL-12p70	0.312305	0.2026	0.1158	1.034
VEGF-D	0.312631	1003	828.4	1.033
IL-6	0.315391	15.19	2.279	1.027
TNF- $\alpha$	0.362507	6.532	3.638	0.9299
IL-1 $\beta$	0.365441	0.4325	0.0401	0.9241
IL-9	0.376048	0.0223	0.0434	0.9035
MIP-1 $\alpha$	0.407185	960	41.75	0.845
IL-1a	0.44907	0.4004	0.0323	0.7707
TNF- $\beta$	0.510507	0.1306	0.1502	0.6689
MIP-1 $\beta$	0.516884	985.5	380.9	0.6588
IL-17B	0.530852	0.3285	0.0761	0.6368
bFGF	0.576049	14.49	19.78	0.5676
IL-1Ra	0.595572	534.6	427	0.5386
IL-2	0.618183	0.1469	0.1743	0.5056
IL-16	0.633594	308.1	285.4	0.4834
IL-31	0.670433	0.0057	0.0026	0.4313
IL-17A	0.696192	1.681	1.839	0.3956
SAA	0.709782	226146594	197909313	0.377
CRP	0.713801	44427291	38995311	0.3715

IL-12/IL-23p40	0.721175	176.3	189.9	0.3615
IL-22	0.724247	1.102	0.8329	0.3573
IL-17D	0.750303	11.67	10.84	0.3223
VEGF-C	0.778752	104.3	110.3	0.2844
PIGF	0.808918	9.766	9.311	0.2448
IL-17A/F	0.810779	0.2145	0.2597	0.2423
Eotaxin	0.866485	3946	4082	0.1701
Eotaxin-3	0.868541	86.44	82.9	0.1675
IL-3	0.869173	0.2589	0.212	0.1666
IL-10	0.892388	0.5017	0.4804	0.1369
IFN- $\gamma$	0.897275	4.919	5.248	0.1306
MCP-1	0.960594	410.5	413	0.04997
TARC	0.963999	309.9	303.7	0.04565
VEGF	0.98068	49.15	48.72	0.02449